



**GE INDUSTRIAL MOTORS**  
a **WOLONG** company

# Product Technical Information

January 8, 2023

Data shown is for the current revision model #. Ensure your nameplate model # matches.

<b>Model Number:</b>	<b>5KS324XAA404D9</b>
<b>Catalog Number:</b>	<b>M9574</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	239C6000RJ

## Accessory Connection Diagrams

<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	None
<b>RTD:</b>	None	<b>Thermistor:</b>	None
<b>Thermostat:</b>	None	<b>Winding Thermocouple:</b>	None
<b>Bearing RTD:</b>	None		

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Marks:

<b>MODEL NUMBER:</b>	<b>5KS324XAA404D9</b>	<b>Estimated Weight:</b>	620 Lbs
<b>Outline Drawing:</b>	239C6000RJ	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG7	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	841
<b>Design Code:</b>	32BD4036B	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	324T	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	8	<b>Nominal Efficiency:</b>	90.2 %
<b>Output Power:</b>	20HP 14.8KW	<b>Guaranteed Efficiency:</b>	89.5 %
<b>RPM:</b>	880	<b>3/4 Load Efficiency:</b>	90.8 %
<b>Voltage:</b>	575	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	12.3
<b>Amps - FL:</b>	24.6	<b>Power Factor:</b>	67.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6312ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6312ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

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Stamped Nameplate Notes:

IEEE-STD-841-2009  
 DE BRG 60BC03JP30, ODE BRG 60BC03JP30  
 INVERTER DUTY PER NEMA MG1 PART 31  
 ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT  
 VAR TORQUE RANGE 0-60 HZ  
 MAX EXPOSED INTERNAL AND EXTERNAL SURFACE  
 TEMPERATURES UNDER USUAL SERVICE CONDITIONS  
 AT 1.00 S.F. DO NOT EXCEED 200 DEG C  
 STAMP NP249A5499AP AS BELOW:  
 MODEL:5KS324XAA404D9 S/N: XXX  
 EX NA IIC T3 GC CSA.09.2216219  
 CLASS I, ZONE 2, AEX NA IIC T3  
 CLASS I, DIV 2, GROUPS A, B, C, D T3  
 -25C <= TAMB <= 40C



**Additional Information:**

8P - T EXTN  
PAINTED FRAME ID & SHAFT,  
FAN COVER INSIDE & ODE E/S OUTSIDE  
346 CU IN - 3.00" NPT  
INPRO SEAL BOTH ENDS  
OIL RESISTANT SLEEVING ON LEADS  
.0015" TIR SHAFT RUNOUT  
ROUTINE TEST REPORT AND 5 POINT VIBRATION TEST  
REPORT INCLUDED IN C/B  
COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS,  
APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS,  
RABBETS AND PLUG THREADS.  
GROUND PAD  
F1 MOUNTING



**Performance Characteristics**

1st Winding 1st Connection

**Design: 32BD4036B**

**Marks:**

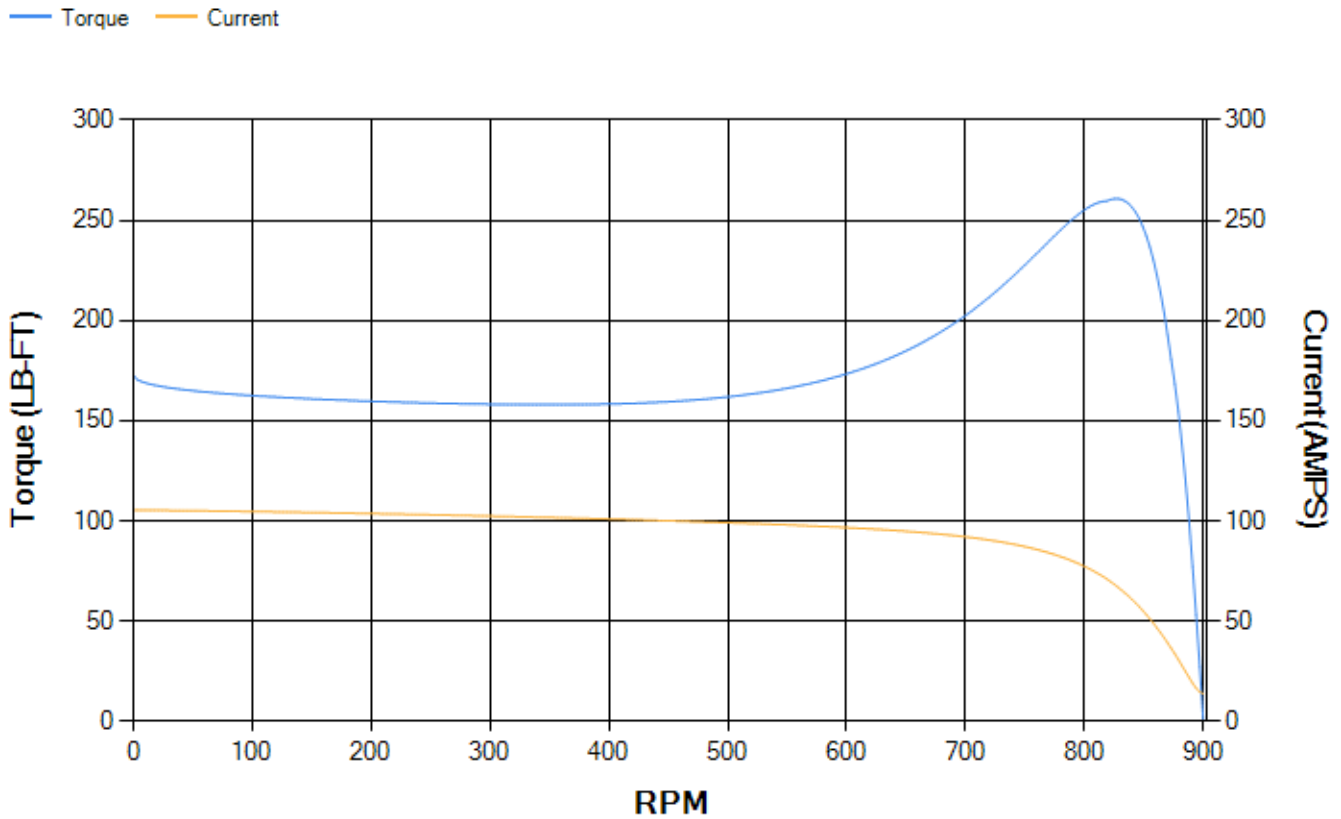
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	89.04	89.62	90.49	90.79	90.03	85.22	0.00
% PF	71.02	70.04	67.72	60.94	48.93	29.8	3.86
AMPS	29.6	27.43	24.41	20.3	17	14.74	13.72

<b>TORQ(FL)#FT</b>	119.38	<b>TORQ(LR)%FL</b>	144.63	<b>TORQ(BD)%FL</b>	216.71
<b>AMPS(LR)</b>	105.4	<b>PF AT START</b>	0.35		

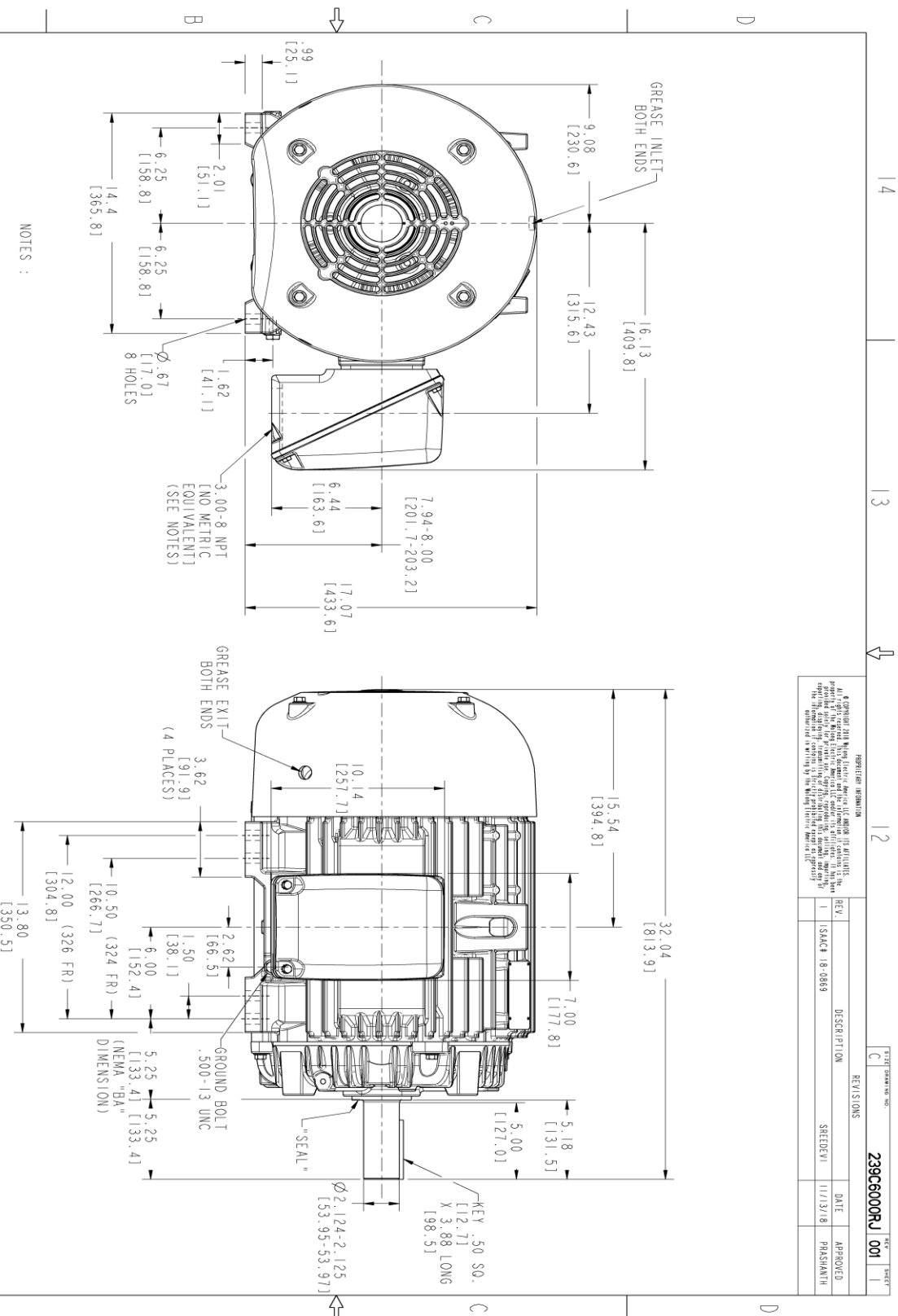
This motor is capable of two cold or one hot start with a maximum connected load inertia of 3418 Lb-Ft Sq (143.9 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 71 seconds. Safe stall time at 100% voltage is 149 seconds cold, 85 seconds hot. Rotor inertia is 7.18 Lb-Ft Sq (0.3 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.188	<b>Short Circuit D-C:</b>	0.016
<b>Short Circuit A-C:</b>	0.02	<b>X/R Ratio:</b>	6.152
<b>Stator Slots:</b>	54	<b>Rotor Slots:</b>	40

**Speed Torque Current Curve (First Connection, First Speed)**



Marks:



- NOTES :
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
  2. F-1 ASM AS SHOWN.
  3. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).
  4. TOLERANCE ON PERMISSIBLE SHAFT EXTENSION RUNOUT IS .0015 T.I.R.

REGISTERED INFORMATION

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239C6000RJ 001

SIGNATURES	DATE	TITLE
DESIGNER	06/19/15	DESIGNER
CHECKED	06/19/15	CHECKED
DATE	06/19/15	DATE
ISSUED	06/19/15	ISSUED

GE INDUSTRIAL MOTORS  
a WOLSKEL company

OUTLINE  
324/326 T TEFC XSD 841  
346 CU IN CONDUIT BOX

239C6000RJ 001

SCALE: 0.250 REF. NO: 239C6000RJ

SHEET 1 OF 1



Marks:

**Connection Diagram**  
**GEM2034E-FIG7**

